Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Inquiry Concerning the Deployment of	)	
Advanced Telecommunications Capability	)	
To All Americans in a Reasonable and	)	CC Docket No. 98-146
Timely Fashion, and Possible Steps to	)	
Accelerate Such Deployment Pursuant to	)	
Section 706 of the Telecommunications	)	
Act of 1996	)	

REPLY COMMENTS OF COX COMMUNICATIONS, INC.

Cox Communications, Inc. ("Cox") hereby submits its reply comments on the Commission's Notice of Inquiry in the above-referenced proceeding. These reply comments make three simple points. First, the astounding growth and development of the Internet and Internet-based services has drawn many technically sophisticated and creative companies into the Internet Services Provider ("ISP") market. Numerous types of ISPs and ISP business models already are successful in satisfying demand for a diverse range of services available at different prices and service speeds. Accordingly, there is no reason for the Commission to assume that additional regulation aimed at a particular segment of the ISP market would assist the advanced services market to function more efficiently.

Second, insofar as Cox is aware, cable operators providing high-speed data services over cable systems do not function as "telecommunications carriers" offering either "telecommunications services" or "advanced telecommunications capability." Assertions contained in a few isolated comments[1/] concerning the suitability of Title II-type network "unbundling" fundamentally miss the point. Cable companies and other new entrants that have

1/ Comments of Circuit City Stores, Inc. at 9-14; America Online, Inc. at 9-11; and MindSpring Enterprises, Inc. at 30-32.

not chosen to become telecommunications carriers to provide high speed data services may not be regulated as common carriers.

Finally, it is not technically feasible for cable operators to "unbundle" their networks and allow multiple ISPs to provide their own independent data services to subscribers over cable facilities. For these reasons as well as those that others have articulated,[2] the Commission cannot accommodate the wishes of a few commenters to impose incumbent telecommunications carrier regulation on new entrant cable operators and others providing high-speed data services.

I. THERE IS NO NEED TO MANDATE ACCESS TO HIGH SPEED INTERNET SERVICE PLATFORMS

Some commenters in this proceeding have suggested that the Commission should mandate access to high speed Internet service platforms, including cable-based Internet services. There is no reason for such an effort. Not only is the Internet marketplace highly competitive on all levels, but mandating access to a specific platform for high speed Internet service would stifle innovation in this growing market.

There can be no question that the provision of Internet service is one of the most dynamic markets in the U.S. There are thousands of local, regional and national Internet service providers across the country and the growth of the industry is nothing short of phenomenal. Providers compete by offering a wide range of services to their customers. Some focus on the content they provide and the size or nature of their customer bases. Others advertise low prices and the availability of a "direct connection" to the Internet. Still

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2/ Cox agrees with the many other reasons against unbundling offered by parties in their comments. *See* Comments of Cablevision Systems Corp. at 2 and 6; Comments of Comcast Corporation at 4-6 and 17; Comments of the National Cable Television Association at 2, 21 and 26; and Comments of Time Warner Cable at 2, 7 and 8.

others focus on providing wireless Internet access at ever-increasing speeds. In other words, Internet service providers recognize that different customers have different needs. ISPs differentiate their services accordingly.

No one competitor is dominant in the Internet business. The largest player in this fragmented market has roughly 13 million subscribers. Others range in size. Providers of cable-based Internet services have approximately 300,000 customers spread among all cable operators nationwide. This total is smaller than the individual subscriber bases of numerous other Internet service providers.

Even in the provision of high speed access there are many alternatives available today or in the near future. The telephone industry rapidly is deploying high speed digital services, including ISDN and xDSL. The cable industry is making cable modem service available. Other companies are partnering with power companies to use their fiber optic facilities to provide high speed access. In the near future, MDS, pursuant to new authority granted by the Commission specifically for this purpose, and LMDS, plan to provide high speed wireless Internet access to residential and business customers. Therefore, consumers will continue to have a wide range of choices for obtaining Internet access generally and high speed Internet access in particular. In this context, there is no need for the government to require one ISP to offer another ISP access to its facilities.

Indeed, requiring a particular provider of Internet access to make its facilities available to other Internet service providers would only stifle innovation, the development of facilities-based alternatives and the growth of the Internet. As the Chief of the Commission's Office of Policy and Plans has observed, one of the principal drivers of innovation is competition. This has been evidenced by the increasing pace of telephone company plans to offer high speed services, which has resulted directly from cable operator decisions to offer cable-based Internet services.[3/]

Mandating access to an Internet service provider's facilities, however, would not encourage competition because it would reduce substantially the incentive for potential competitors to develop additional facilities-based alternatives. As a result, opportunities for higher speeds, enhanced reliability and the other benefits that flow from facilities-based competition would be lost, to the detriment of consumers.

It is particularly important to avoid these results because there is no evidence that any provider's high speed access service constitutes an "essential facility." Yet, such a showing would have to be made prior to imposing access requirements on currently unregulated ISPs. As described above, there are a myriad of competitive players in the Internet services market and a variety of existing and future mechanisms for consumers to obtain high speed access if they so desire. Moreover, the Internet is only in its infancy and the market has yet to establish clear patterns of consumer demand. Consequently, even making the assumption that the speed of connection is the only factor that matters to Internet consumers, no provider of high speed connections has or will be the kind of bottleneck that would constitute an essential facility. Thus, there is no need for or consumer benefit to mandating access to any high speed Internet access platform.

3/ "After [cable companies began] deploying cable modems . . . [o]ut of abject fear, U S West started rolling out a DSL lite service in Phoenix. That's the kind of competition and the dynamics that we want." Bob Pepper, Chief, Office of Plans and Policy, *Let's be Clear: Identity, Transparency and the Net*; *1998 Platforms for Communication Forum*, "FCC Policy Chief Gives Interview," at p. 95. EDventure Holdings, Inc. (3/22-25/98).

II. CABLE OPERATORS PROVIDING HIGH-SPEED DATA SERVICES ARE NOT SUBJECT TO TITLE II REGULATION

The majority of ISPs and ISP groups commenting understand that the market already creates sufficient incentives to ensure the widespread deployment of advanced services. A few commenters nevertheless assert that the Commission should "unbundle" the cable network, while providing no specifics as to how this task should be approached or accomplished. These commenters concede that the only source of Commission authority to require network unbundling is contained in Title II, which includes the common carrier provisions of the Communications Act. The insurmountable obstacle those commenters ignore is that cable operators providing high-speed data services are not subject to any of the Title II provisions that conceivably could be used to mandate access by competing ISPs to parts of the underlying cable plant.

As the Commission already has determined, Section 706 is not an independent grant of authority for the Commission to take regulatory action not otherwise permitted by the Communications Act.[4/] The Commission also is well aware that the Act requires only "incumbent local exchange carriers" to unbundle their networks into piece parts for lease to third parties wishing to provide telecommunications services.[5/] Similarly, the only entities with a

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4/ *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket Nos. 98-147, 98-26, 98-11, 98-32, 98-15, 98-78, 98-91, RM 99244, Memorandum Opinion and Order and Notice of Proposed Rulemaking, FCC 98-188 (released August 7, 1998) at ¶¶ 69-78.

5/ In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, *First Report and Order*, CC Docket Nos. 96-98 and 95-185 (released August 8, 1996) ("*Local Competition Order*") at ¶¶ 1241-48. *See also* 47 C.F.R. § 51.223(a) (prohibiting state application of Section 251(c) requirements to non-incumbent LECs).

resale obligation are "local exchange carriers."[6] And the only entities with interconnection duties are "telecommunications carriers."[7] Each of these terms is clearly defined by statute. Wishing that cable operators fit into these definitions when providing high-speed data services does not make it so. There is simply no factual or legal predicate for regulating cable operators providing high speed data services as Title II telecommunications carriers (let alone as incumbent local exchange carriers).

As a recent FCC staff working paper observes, the Commission could reasonably conclude that high-speed data services offered over a cable system are "cable services" regulated under Title VI of the Act.[8] What the paper does not discuss is that the cable data services of which Cox is aware also fall within the statutory definition of "information services." Information services are those that manipulate information for the end user subscriber by "generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications."[9] Cox must perform virtually all of these functions to provide high-speed data services to end users over its managed network. Cable data services thus are information services — a regulatory category the Commission repeatedly has confirmed is mutually exclusive from "telecommunications service."[10] Accordingly, regardless of whether cable data services also are Title VI services, one thing is plain: they are information

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6/ 47 U.S.C. § 251(b)(1).

7/ 47 U.S.C. § 251(a)(1).

8/ Barbara Esbin, Federal Comm. Comm'n, *Internet over Cable: Defining the Future in Terms of the Past*, Office of Plans and Policy Working Paper No. 30, 83-89 (August 1998).

9/ 47 U.S.C. § 3(20).

10/ *See* Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Report to Congress*, released April 10, 1998, at ¶¶ 13, 33, and 44.

services, not telecommunications services subject to Title II regulation. As such, there is no legal basis for "unbundling" cable-based information services by this Commission.

Congress already has taken great care to distinguish telecommunication services from information services. Moreover, express Congressional intent that the Internet (as an emerging interconnected network of information services) should be kept free of the regulatory regime of Title II is strongly supported by the Administration. Indeed, cost-based interconnection, network element unbundling, carrier wholesale/resale discounts and equipment collocation are the carefully chosen Title II regulatory tools which Congress has applied to incumbent telephone monopolies to open the local exchange telecommunications market to competition from new entrants. Tinkering with the Title II regulatory toolkit is not appropriate in the fledgling Internet services market, where no ISP has demonstrated market power and where additional regulation would inhibit new technology and investment.

III. CRITICAL DIFFERENCES IN NETWORK TOPOLOGIES BETWEEN CABLE AND TELEPHONE NETWORKS REQUIRE CRITICAL ANALYSIS

The Internet network topology and cable network topology are fundamentally different from the topology of the circuit switched regulated telecommunications network. Moreover, as terrestrial wireless, satellite and public utility Internet packet-switched applications are deployed, even more topological differences will emerge. The mere presence of different types of networks and service arrangements, however, does not signal a problem requiring regulatory intervention. Rather, it serves as a warning to regulators that they must not arbitrarily apply one set of regulations, designed for a particular network topology operating in a monopoly environment, to completely different network topologies operating in a competitive environment.

Cable topology illustrates this point. To deliver data at high speeds over the cable plant, cable network spectrum capacity must be managed because it is shared by the number of modem users on each cable node. Due to the "bursty" but extremely high capacity of cable data traffic, an end user may receive requested information in fractions of a second but may then take many seconds or perhaps minutes to evaluate that information.[11/]

Unlike local loop telephone topology, the network topology of a cable system requires the installation of a cable modem termination system (CMTS). The CMTS accomplishes a net protocol conversion of the bit stream incoming from the Internet so that Internet information can reach the end user on the cable network. The CMTS also manages a bursty request/grant protocol. It can manage this cacophonous traffic, however, only if it is in sole charge of all routing decisions.

It is the CMTS that enables cable modem access to the Internet. As a practical matter, this means that only one CMTS can operate on a channel. Installing more than one CMTS on a network channel would be like having two different traffic cops operating at a busy intersection, directing their different streams of traffic into the same intersection with no knowledge of the other's instructions. As would be true of two, uncoordinated traffic cops, having more than one CMTS on the same network channel would cause collisions and interference.

CMTS provisioning of information services also involves complex business arrangements that include general revenue sharing, advertising and transaction revenue sharing, opening screen arrangements, network support operations, private regional backbone services, complex provisioning for new service connections and high level customer support. These

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11/ Recent testing of cable data penetration rates per node have demonstrated that high rates of penetration can be achieved with *de minimis* loss in speed delivered to the end user.

considerations, however, are ignored entirely by commenters seeking cable network unbundling. In addition, regulatory oversight of business arrangements between parties engaged in the provisioning of information services to end users would create an unimaginable cost of service thicket. It would require a degree of Commission micromanagement that is anathema to both Congress and the Administration. In the absence of any demonstrated market power by any commercial player on the Internet, the Commission must avoid unnecessary regulation that would discourage cable and other new entrants from being a significant pro-competitive force in the advanced services market.

IV. CONCLUSION

Based upon today's and reasonably foreseeable future markets, no commenter has identified a network access problem in the competitive contest to deploy advanced services. The misguided commenters calling for cable unbundling fail to connect their goals to any applicable legal framework and do not even attempt to demonstrate that cable access is viable from a technical perspective or that cable is an "essential facility" for the delivery of Internet services. This is truly a situation where the Commission would do more harm than good if it disrupted market-based expectations and the competition that has emerged to date in the advanced services market.

Respectfully Submitted,

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